

In the specification:

Please amend paragraph 6 as follows:

Many attempts have been made to develop new concepts of light emitting structures or detectors which can be incorporated in silicon technology. For example, infrared detectors basing on germanium on Si wafers have been investigated, see for example L. Colace et al., Appl. Phys. Lett. 76, 1231 (2000). Moreover, porous silicon has been analyzed (A.G. Cullis et al., J. Appl. Phys. 83, 909 (1997)). In addition, Si-Ge quantum well structures have been investigated (H. Presting et al., Appl. Phys. Lett. 69, 2376 (1996)), as well as quantum dot structures of SiGe (P. Schittenhelm, "Selbstorganisation und Selbstordnung in Si/SiGe-Heterostrukturen", in "Selected Topics of Semiconductor Physics", Eds: G. Abstreiter, M. Stutzmann, P. Vogl, TU München 1997, ISBN 3-932749-02-2). Moreover, carbon doped SiGe has been investigated, see T. Brunhes et al., Appl. Phys. Lett. 77, 1822 (2000) and K. Eberl et al., Thin Solid Films 294, 98 (1997). Furthermore, doping of silicon with centers for luminescence, for instance doping with erbium (~~Y.Q. Wang et al., Appl. Phys. Lett. 83, 347 (2003)~~ F. Priolo et al., "Excitation and nonradiative deexcitation process of Er³⁺ in crystalline Si", Phys. Rev. B 57,4443 (1998)), and silicon nanocrystals have been investigated.